APIS ROTUNDATA FABRICIUS, 1793 (INSECTA, HYMENOPTERA): PROPOSED SUPPRESSION OF LECTOTYPE AND DESIGNATION OF NEOTYPE IN ACCORD WITH *MEGACHILE ROTUNDATA* AUCT. Z.N.(S.) 2042

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1. The purpose of this application is to request that the International Commission on Zoological Nomenclature use its plenary power to suppress the lectotype of *Apis rotundata* Fabricius, and authorize designation of a neotype in accord with *Megachile rotundata* auct. nec Fabricius.

2. The nomenclatural details are given below.
The current name of the bee *Megachile rotundata* auct. nec Fabricius is based on a misidentification of more than 150 years standing (Hurd, 1967). As early as 1962, Dr. T. B. Mitchell questioned the identity of *Megachile rotundata* auct. Subsequently, Dr. P. D. Hurd, Jr., examined the collections of Fabricius in Kiel and Copenhagen. Of the four specimens labelled as this species in Kiel, two were found to belong to the genus *Osmia* and two damaged specimens were identified as *Megachile* (*Eutricharaea*). A single specimen was found in Copenhagen which, unlike those in Kiel, agreed with the original description of *Apis rotundata* Fabricius. Dr. Hurd (1967) designated this specimen as lectotype of *Apis rotundata* Fabricius. Dr. Hurd also stated that *Apis rotundata* Fabricius is not the same species as *Megachile rotundata* auct.

3. In Dalla Torre's 1896 catalogue of the world bee fauna, *Apis rotundata* Fabricius was transferred to the genus *Megachile*. *Apis pacifica* Panzer, 1798, is listed as a junior synonym of *Megachile rotundata* (Fabricius) (ibid.). No doubt Dalla Torre based the synonymy of *Apis pacifica* Panzer with *Apis rotundata* Fabricius on the following statement by Panzer (1806): "Prof. Fabricius advised me that the specimens of my *pacifica* sent to him are certainly his *rotundata*". According to Dalla Torre, various combinations of Panzer's *Apis pacifica* occurred in the literature only five times between 1798 and 1896.

4. After Mitchell had questioned the identity of *Megachile rotundata* auct., the late Otto Rebmann discovered the types of *Apis pacifica* Panzer in the Berliner Zoologisches Museum. He designated a lectotype and stated that *Apis pacifica* Panzer is the same species as *Megachile rotundata* auct. nec Fabricius (Rebmann, 1967).

5. The problem could be considered resolved were it not for the extenuating circumstances outlined below. *Megachile rotundata* auct. is a Palaearctic species, ranging from Europe and North Africa to Mongolia. It was introduced into the United States during or shortly after World War II (Mitchell, 1962). Having spread rapidly from the Atlantic to the Pacific Coast, it is now found throughout most of North America. In the early 1960's this species was domesticated as a pollinator of alfalfa (Stephen, 1961: Bohart, 1962). Alfalfa, or lucerne, is the most important forage crop in the world.

Producers of alfalfa seed have been able to increase yields approximately tenfold through the use of *Megachile rotundata* auct. Production and sale of these bees has become a big business. The bees have been exported in commercial quantities from the American Northwest to every continent save Antarctica. This insect has become so important that the Entomological Society of America Committee on Common Names of Insects has proposed that the name "alfalfa leafcutting bee" be formally adopted as the common name of "*Megachile rotundata* (Fabricius)" (Wressel, 1972).

6. By now the number of scientific papers, technical and lay bulletins on the husbandry of this species and control of its numerous parasites, predators and diseases must number in the hundreds. Furthermore, the commercial availability of this bee has made it the subject of publications on circadian rhythms and toxicology, as well as diet and host specificity. Thus the name "*Megachile rotundata* (Fabricius)" is firmly established in a large and rapidly growing body of literature.

7. In the five years since publication of Rebmann's paper, I have seen only one publication substituting *Megachile pacifica* (Panzer) for *Megachile rotundata* auct. (Holm and Skou, 1972). The great majority of authors have chosen to ignore the name *Megachile pacifica* (Panzer). If the International Commission on Zoological Nomenclature approves the course of action outlined below, then *Megachile pacifica* (Panzer) will become a junior synonym of *Megachile rotundata* (Fabricius).

8. The proposed neotype is consistent with *Megachile rotundata* auct. as described by Dr. T. B. Mitchell (1962, pp. 122–124). The neotype is a female labelled as follows: top label, "Simontornya Hu. occ. leg. Pillich, 12.8.33 C. can."; middle label, "*M. rotundata* F. ♀, det. J. D. Alfken 1935"; bottom label, "NEOTYPE, *Apis rotundata* Fabricus, ♀, R. B. Roberts 1973". The neotype is from the collection of Dr. T. B. Mitchell, who has generously agreed to deposit it in the Zoological Museum of Copenhagen.

9. Considering the long established use of the name "*Megachile rotundata* (Fabricius)" for this important insect, I believe unnecessary confusion would result from substitution of the name *Megachile pacifica* (Panzer). Thus, in the interests of the stability and universality of nomenclature, the International Commission on Zoological Nomenclature is asked:

(1) to use its plenary powers to set aside all type selections for *Apis rotundata* Fabricius, 1793, made prior to the ruling now asked for and, having done so, to rule that the species is to be interpreted by reference to the neotype specimen designated above;

(2) to place *rotundata* Fabricius, 1795, as published in the binomen *Apis rotundata*, on the Official List of Specific Names in Zoology.

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